

# [BRAKE PEDAL SYSTEM FOR IMPROVED BRAKING PERFORMANCE]

## Abstract of Disclosure

A brake system includes a brake pedal connected to a brake pedal actuator for applying a variable brake feel force to the brake pedal. A forward detection apparatus is used to detect the relative distance and speed to a target vehicle. A controller monitors the relative distance and speed to notify the driver to slow down. Upon application of the brake, the brake feel force is reduced in proportion to the level of threat detected. In this way, the driver is induced to apply an increased brake pedal force.

## Figures